

Receiving Report

Date: 14/5/18

Batch No: M130412

Supplier: BEAERO

Dart P/O: 25790

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☒
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC18 Inspection ☐ N/A ☐
 Work Order ☐ N/A ☐

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number

Initials of Receiver QC12

Production/Admin:
 Date:
 Received/Costing:
 Initial:

Location



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO25790**

Purchase Order Date 9/16/2014

PO Print Date 9/16/2014

Page Number 1 of 2

Order From :

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

VU-BEA001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Michael Gregoire

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

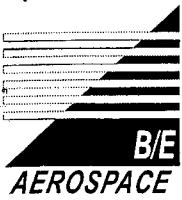
FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	AN3C11A	BOLT	9/18/2014 Yes 9/18/2014		50.00 Each	\$0.80	\$40.00
Line Total:							\$40.00
2	MS27039C1-14	Screw	9/18/2014 Yes 9/18/2014	FN	100.00 Each	\$0.55	\$55.00
Line Total:							\$55.00
3	CR3553-4-02	RIVET	9/18/2014 Yes 9/18/2014	FN	100.00 Each	\$1.09	\$109.00

Note:

9/16/2014



B/E Aerospace, Inc.

CONSUMABLES MANAGEMENT

Tel: +1.305.925.2600 • Fax: +1.305.507.7191 • www.beconsumables.com
Remit to Address: 88289 Expedite Way, Chicago, IL 60695-0001
Wire Instructions: B/E Aerospace Consumables Management • JPMorgan Chase Bank New York
ABA: 021000021 • Account: 304639273 • SWIFT: CHASUS33 • CHIP UID: 0002

INVOICE NUMBER

HW8K2M

PAGE 1

SOLD TO:
002409

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON
CANADA K6A 1K7

SHIP TO:

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON
CANADA K6A 1K7

HISTORY REPRINT

ORDER NO. PO25790		DATE 09/16/14	SHIP VIA FEDX INTL P1 COLL		TERMS NET 45		SHIPPING TERMS FOB-CARSON		
ITEM NO.	QUANTITY ORDERED	PART NUMBER AND DESCRIPTION			PRICE	UNIT	BACK ORDER	SHIPPED	AMOUNT
2	100	FED. TAX# 06-120-9796			0.550	EA	0	100	55.00
		MS27039C1-14							
		SCREW							
		TARIFF: 7318.15.6080							
		MFR: 3V FASTENERS							
		CTRL# : 2011H19957							
		LOT#: 889677							
		LOT QTY: 100							
		ECCN :9A991							
		Country Origin: YYYYY							
These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.									
***BOLTS AND NUTS									
***PARTS FOR CIVIL AIRCRAFT									
FREIGHT ACCT# 15179324-0									
TEL# 613-632-3336									
emar 98FEE8									
SHIPPED ON 09/16/14									
			SUBTOTAL:		55.00				
			HANDLING:		0.00				
			DISC/ALL:		0.00				
			INCM FRT:		0.00				
			FREIGHT :		0.00				
			TOTAL :		55.00USD				
					U.S. CURRENCY				
MATERIAL TO BE RETURNED MUST HAVE PRIOR AUTHORIZATION BY B/E AEROSPACE									

ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE.

SHIPPED FROM: 1351 CHARLES WILLARD ST, CARSON, CA 90746

DUPLICATE INVOICE

BY RECEIVING DELIVERY OF THE ITEMS COVERED BY THIS INVOICE, BUYER AGREES TO THE TERMS AND CONDITIONS OF SALE AT:
http://www.beconsumables.com/cm/conditions_of_sale.cfm



3-V FASTENER CO., INC.

3-V Fastener Co., Inc.
320 Reed Circle
Corona, CA 92879
Tel: 951-734-4391
Fax: 951-734-0127
www.3VFasteners.com

PACKING LIST

SHIPPED TO:
B/E AEROSPACE
9835 NW 14TH STREET
MIAMI FL 33172

CUSTOMER	OUR ORDER NO.	PICK SLIP NO.	YOUR ORDER NO.	DATE PRINTED
141327	102358	1315823	OTE994	08/18/2011

2.000	MS27039C1-14 Rev. 3	LTA	889677	27,370
				27,370

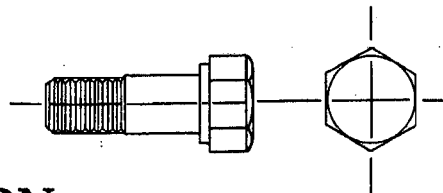
**3V™ FASTENERS**

PRECISION AEROSPACE FASTENERS

a **PEM®** Company

320 Reed Circle • Corona, CA 92879

Tel: 951-734-4391 • FAX: 951-734-9488

**TEST CERTIFICATION**

Cert # : 50272 Cert Date: 08/19/11 LOT #: 889677 Page: 1

MFG. 02/14/11

Cust # : 141327

P.O. #: OTE994

Customer : B/E AEROSPACE

P.O. Qty: 50000

Ship To : MIAMI, FL

Ship #: 1315823

Ship Qty: 27370

Part #: MS27039C1-14

MFG. Part #: NASM27039C1-14 REV.3

Material Spec: AMS5731L

Heat #: 93FC

Type: A286

Mill, Vendor: ALLVAC / BROWN PACIFIC

Code: 12690

Procure Spec: NASM7839

Metallurgical Tests

Hardness: N/A

Grain Size: N/A Decarb: NONE

Metallurgical, Special Process and Subcontracted Test Information

THREADS INSPECTED PER MIL-S-8879C N.3, AS8879D OR MIL-S-7742D A.1

MAG PERM <2.0 PER ASTM A 342/A 342M 04 MET.3

MACRO AND MICROSTRUCTURE SATISFACTORY 32 PCS

HEAT TREAT PER AMS2759/3E BY CONTINENTAL #103879

PASSIVATE PER AMS2700C MET.1 TY2 CL1 BY ACTIVE #104244

DFARS 252.225-7014 ALT I ONLY AS IT APPLIES PER P.O.

Tensile per NASM1312-8

Minimum Requirement: 2500 LBS

Load :	4023	3952	4020	4042	4000
Failure:	THD	THD	THD	THD	THD

Load :	4002	4037	4058	3994	3998
Failure:	THD	THD	THD	THD	THD

Load :	3993	4063	4031	4069	4038
Failure:	THD	THD	THD	THD	THD

Load :	4066	4082	3985	3988	4044
Failure:	THD	THD	THD	THD	THD

Load :	4022	4011	4063	4015	4081
Failure:	THD	THD	THD	THD	THD

Load :	4107	4103	4075	4027	4035
Failure:	THD	THD	THD	THD	THD

Load :	4051	4033	0	0	0
Failure:	THD	THD			

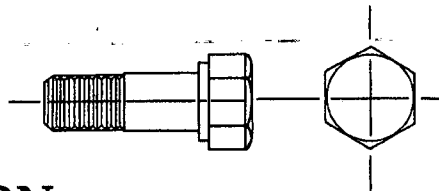


3V™ FASTENERS

PRECISION AEROSPACE FASTENERS

a **PEM®** Company

320 Reed Circle • Corona, CA 92879
Tel: 951-734-4391 • FAX: 951-734-9488



TEST CERTIFICATION

Page: 2

Customer: B/E AEROSPACE

LOT #: 889677

Cert #: 50272

THIS TEST CERTIFICATION SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF 3-V FASTENERS CO., INC. TESTING LABORATORY.

THIS CERTIFICATION SHALL NOT BE USED BY THE CUSTOMER TO CLAIM PRODUCT ENDORSEMENT BY ANY AGENCY OF THE U.S. GOVERNMENT.

3-V FASTENERS CERTIFIES THAT THE PRODUCT SHIPPED ON ABOVE PURCHASE ORDER WERE MANUFACTURED, INSPECTED AND TESTED IN COMPLIANCE WITH ALL APPLICABLE PRINTS AND SPECIFICATIONS. ALL SUPPORTING DOCUMENTATION IS ON FILE AT 3-V. REGISTERED ISO 9001:2008 + AS9100 SAI GLOBAL CERT-0049384. GAGE CODE 1ER65, BAE APPROVAL BAE/AG/30148/CAL, AIRBUS APPROVAL 30085.

QUALITY ASSURANCE LAB SUPERVISOR

Daniel E. Henson 8-19-2011
DANIEL E. HENSON

3V FASTENERS CO., INC.		FINAL INSPECTION REPORT		PG 1 OF 2	
PART NUMBER	REV.	LOT #	LOT SIZE	SAMPLE SIZE	
MS27039C1-14	3	889677	55519	500032	
DESC: CRUCI PAN HD EXT.		PRINT NUMBER		SAMPLING PLAN	
10/32 X .906		NASM27039		ANSI Z1.4, GL II / S-3	

PRINT CHARACTERISTIC	PRINT REQ.	ACTUAL	ACC.	REJ.	GAGE EQUIPMENT
HEAD MARKING	27039C1-14 LOGO	27039 C1-14 LOGO	✓		VISUAL/10X
LENGTH +.032-.015	.937-.891	.918 - .909	✓		CALIPER
GRIP LENGTH +- .015	.453-.423	.433 - .428	✓		CALIPER/OPT.COMP.
THREAD PITCH DIA.	.1697-.1674	.1684 - .1679	✓		TRI-ROLL
THREAD FUN. DIA.	.1697-.1674	.1684 - .1679	✓		TRI-ROLL/RING GAGE
THREAD MAJOR DIA.	.1900-.1840	.1870 - .1857	✓		MICROMETER
THREAD ROOT RADIUS	N/A	N/A	-		OPTICAL COMPARATOR
THREAD MINOR DIA.	N/A	N/A	-		TRI-ROLL/OPT.COMP.
GRIP DIAMETER	.1890-.1860	.1881 - .1874	✓		MICROMETER/OPT COMP
HEAD DIMENSION	.373-.357	.370 - .361	✓		CALIPER
BEARING SURFACE DIA.	N/A	N/A	-		OPTICAL COMPARATOR
BEARING SURF. HGT.	N/A	N/A	-		OPTICAL COMPARATOR
RADIUS UNDER HEAD	.020-.010	.020 - .018	✓		OPTICAL COMPARATOR
HEAD HEIGHT	.133-.122	.131 - .124	✓		CALIPER/MICROMETER
SOCKET/RECESS DEPTH	.124 MAX.	< .124	✓		HEIGHT STAND
SOCKET/RECESS WIDTH	.199-.186	.197 - .186	✓		CALIPER/PIN GAGE
SOCK./RECESS GAGING	.113-.089	.106 - .089	✓		PENETRATION GAGE
FIN THD, B/S, RAD, GRIP	32/RA MAX.	< 32	✓		COMPARATOR GAGE/10X
FIN. ALL OTHERS	125/RA MAX.	< 125	✓		COMPARATOR GAGE/10X
BURRS/SHARP EDGES	NONE ALLOWED	NONE	✓		VISUAL/10X
BEARING SURF. SQ.	2 DEG. MAX.	< 2°	✓		OPTICAL COMPARATOR
SHANK STRAIGHTNESS *	.0040 TIR	< .0040	✓		CONCE. GAGE/SUR. PLT

INSP. PERFORMED & ACCEPTED BY:	<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="text-align: center;"> 3V INSP 03 </div> </div>	DATE: 02/10/11	
REPORT PREPARED BY: DAN HENSON	NEW DATE: September 30, 2010	855548	

FORM 11-1, REV 5 03/17/98

NOTES:

1. * = PER INCH OF LENGTH

[illegible]



BROWN-PACIFIC, INCORPORATED
 13639 BORA DR. / SANTA FE SPRINGS / CALIFORNIA 90670
 (562) 921-3471 • (562) 921-7012 FAX

MATERIAL TEST REPORT

12-21-10 12690

F.O.B. SFS		SHIP VIA WILL CALL		JOB NO.	INVOICE NO. -0- 75150
SHIP TO SOLD TO	3-V FASTENERS 320 REED CIRCLE CORONA, CA 92879-1349			ORDER DATE 10/20/10	THIS MATERIAL WAS MANUFACTURED AND TESTED IN CONFORMANCE WITH THE NOTED SPECIFICATIONS. THE INFORMATION PRESENTED HEREIN IS CORRECT AS CONTAINED IN THE COMPANY RECORDS. G. MORENO, LAB 12/17/2010 GM
	<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> 3V LAB 06 </div>			CUST. P.O. NO. 101978-6	
				DUE DATE 12/10/10	
				6 COILS 1131 #	
PRODUCT ORDERED				QTY. ORDERED	
0.328 DIA TYPE A-286 CONVERTED TO 0.186/0.187 DIA SEAMSAFE COPPER COATED COIL				1000	KNOWINGLY OR WILLFULLY RECORDING FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHABLE AS A FELONY UNDER FEDERAL LAW, TITLE 18, CHAPTER 47.

SPECIFICATIONS M-001-SS REV 17 (W/EXCEPTIONS PER LETTER DATED 11/17/09) CAP OF AMS5731L, 5732J, 5734K, 5737P, CHEM ONLY AMS5853C 13/17% CR

GRADE A-286	MILL NO. 18	HEAT NO. 93FC
----------------	----------------	------------------

CHEMICAL ANALYSIS

C: .026 ✓	AL: .22 ✓
MN: .28 ✓	TI: 2.10 ✓
P: .012 ✓	B: .007 ✓
S: <.0003 ✓	CB:
SI: .18 ✓	TA:
NI: 24.39 ✓	CB+TA:
CR: 14.38 ✓	CU: .06 ✓
MO: 1.13 ✓	SE:
CO: .04 ✓	N:
V: .22 ✓	FE: 56.92
CA:	PB: <.0001
MG:	BI: <.00001
ZR<.01	

ASTM GRAIN SIZE: 7/8 ✓
 ALLVAC, USA ✓
 MACRO:
 MICRO:
 OTHER: MERCURY FREE. ✓

MECHANICAL PROPERTIES AND CAPABILITY

AS SHIPPED PROPERTIES	TENSILE, KSI	YIELD, KSI	% ELON
	✓ 117.3		
% RA		HARDNESS	SHEAR, KSI
ETT °F	TENSILE, KSI	YIELD, KSI	% ELON
			% R.A.
STRESS RUPTURE	TEMP °F	STRESS, KSI	HOURS
	✓ 1200F	65	48.6
	✓ 1200F	70	48.6
			% ELON
H.T. PROCEDURE	✓ 1650F 2HRS W/Q, 1325F 16HRS A/C		
✓	TENSILE, KSI	YIELD, KSI	% ELON
	164.0	110.6	24.2
✓	% R.A.	HARDNESS	SHEAR, KSI
	53.9	RC 29	
H.T. PROCEDURE	✓ 1800F 1HR W/Q, 1325F 16HRS A/C		
✓	TENSILE, KSI	YIELD, KSI	% ELON
	167.6	112.9	29.2
✓	% R.A.	HARDNESS	SHEAR, KSI
	55.3	RC 30	
H.T. PROCEDURE	✓ 1250F 8HRS A/C		
✓	TENSILE, KSI	YIELD, KSI	% ELON
	191.7	167.4	21.3
✓	% R.A.	HARDNESS	SHEAR, KSI
	51.0	RC 36	

1.161
 2.159
 3.191
 4.163
 5.187
 6.255

1136

Traveler(s) Heat # Ingot#
21443 A 93FC

CERTIFICATE OF TEST

Page 1 of 6

ATI Allvac
4374 Lancaster Highway
Richburg, SC 29729
Phone (803) 789-3595

Prof 1 Rev 0

Customer Name
BROWN PACIFIC INC.
13639 Bora Drive
Santa Fe Springs, CA

Purchase Order
M2671AK-301

Size Alloy
.328" Rd A-286

PCS 34 Weight 24004

Date: 11/19/2010

Quality Auditor: Sheila Gilbert

Sheila Gilbert

CONDITION SHIPPED

SURFACE: Hot Rolled; Descaled

HEAT TREAT: Mill Annealed / Direct Quenched



SPECIFICATIONS

S-400	10/10/2008	S-4001	06/25/04
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HEADER REMARKS

Capability: AMS 5731 Rev. L

AMS 5732 Rev J

AMS 5734 Rev K

AMS 5737 Rev P

Chemistry only: AMS 5853 Rev C

C50T35 Rev S4 Am7

ASTM A-453 Rev 2010 Type 660

	CHEMISTRY								CR EQ = Chromium Equiv		Cb = Nb	
	C	S	Mn	Si	Cr	CR EQ	Mo	Co	Ti	Al	B	Zr
HEAT AVG	.026	<.0003	.28	.18	14.38	-	1.13	.04	2.10	.22	.007	<.01

12690

Traveler(s) Heat # Ingot#
 21443 A 93FC ATI Allvac 4374 Lancaster Highway Richburg, SC 29729 Phone (803) 789-3595 Page 2 of 6

	Fe	Cu	Ni	P	Cb	Ta	W	V	Cb+Ta	Ti+Al	Ni+Co	Y
HEAT AVG	56.92	.06	24.39	.012	.05	<.01	.02	.22	.05	2.32	24.43	-

CHEMISTRY (TRACE)

	Bi	Ca	Pb	Se	Ag	Sb
HEAT AVG	-	-	-	-	-	-
GLADLE AOD	<.00001	<.0010	<.0001	<.00005	<.0001	.0004

CHEMISTRY METHOD

ELEMENTS TESTED BY METHOD

WET-PB
 WET-BI
 WET-SE
 WET-SB
 OES-CA
 OES-AG
 CS-CS
 OES-B
 XRF-FE(FEBAL)

PB
 BI
 SE
 SB
 CA
 AG
 C,S
 B
 MO,W,CR,NI,CO,CU,P,NB,TA,ZR,MN,V,TI,AL,SI,FE



CHEMISTRY REMARKS

Chemistry tested at ATI ALLVAC unless otherwise noted.

CHEMISTRY ANALYTICAL METHODS

CS = Combustion/IR Detection

GAS = Inert Gas Fusion

OES = Spark Optical Emission

XRF = X-Ray Fluorescence

WET = Graphite Furnace Atomic Absorption(SE); Mass Spectroscopy (PB,BI,SB)

126921

Traveler(s) Heat # Ingot#
 21443 A 93PC ATI Allvac 4374 Lancaster Highway Richburg, SC 29729 Phone (803) 789-3595 Page 3 of 8

Capability Tensile Test

Operation	Ingot	Heat Treat Code	Test Dir	Temp F	UTS ksi	2% Yield ksi	.02% Yield ksi	%EL 4D	%EL 5D	%RA	Gage Length 4D	Gage Length 5D	Tensile Diameter	Tested At
		1650EK	LC	ROOM	164.0	110.6		24.2		53.9	.648		.162	ACUREN
		1800MB	LC	ROOM	167.6	112.9		29.2		55.3	.640		.160	ACUREN
SUPER		48A	LC	ROOM	94.6								.330	ACUREN

Test Dir: L = Longitudinal, T = Transverse, ST = Short Transverse, LT = Long Transverse,

TC = Transverse Center At Size, TM = Transverse Mid-Radius At Size,

PC = Pancake, DB = Drawbar, PD = Paddle, TT = Top Transverse At Size,

BT = Bottom Transverse At Size, LC = Long Center, TX = Top Transverse Mid-Radius At Size,

LM = Longitudinal Mid Radius, LS = Longitudinal Surface, TS = Transverse Surface

Operation: SUPER = Crosshead Sep Rate of .10 inches/minute



Capability Stress Rupture

Hi Tri Ingot	Test Code	Temp F	Load Kai	Life Hrs	Upd1 Kai	Life Hrs	Upd2 Kai	Life Hrs	Upd3 Kai	Life Hrs	Upd4 Kai	Life Hrs	Upd5 Kai	Life Hrs	Upd6 Kai	Life Hrs	Upd7 Kai	Life Hrs	%EL 4D	%EL 5D	%RA	Bar Diam	Type Bar
1650EK	LC	1200	65	48.6	70	59.0	75	66.3	80	73.8	-	-	-	-	-	-	-	-	26.4			.178	CSN
Notch Radius = .005 BAR RUPTURED IN THE SMOOTH SECTION																							
																			Tested At		ACUREN		
1800MB	LC	1200	70	48.6	75	59.0	80	66.4	85	70.2	-	-	-	-	-	-	-	-	34.8			.178	CSN
Notch Radius = .005 BAR RUPTURED IN THE SMOOTH SECTION																							
																			Tested At		ACUREN		

Test Dir: L = Longitudinal, T = Transverse, ST = Short Transverse, LT = Long Transverse, TC = Transverse Center at size, TM = Transverse Mid-Radius At Size,

PC = Pancake, DB = Drawbar, PD = Paddle, TT = Top Transverse At Size, BT = Bottom Transverse At Size, LC = Long Center, TX = Top Transverse

Mid-Radius At Size, LM = Longitudinal Mid Radius, LS = Longitudinal Surface, TS = Transverse Surface

Type Bar: TSR = Smooth, CN = Center Notch, CSN = Combination Smooth and Notch

CAPABILITY HARDNESS

Ingot	Heat Treat Code	Hardness val	Hardness Type	Tested At
	1650EK	29	HRC	ACUREN
	1800MB	30	HRC	ACUREN
	48A	85	HRBW	ACUREN

Traveler(s)
21443 A

Heat #
93FC

ATI Allvac 4374 Lancaster Highway

Richburg, SC 29729

Phone (803) 789-3595

Page 4 of 6



TENSILE/STRESS RUPTURE HEAT TREATMENT

HT Code: 1650EK

Furnace

Cool Rate

Per Hrs

(F)

Cool

Code

Location Temp F Hours Mins

PLANT	MILL ANNEALED / DIRECT QUENCHED				
LAB	1850	2			WQ
LAB	1325	16			AC

HT Code: 1800MB

Furnace

Cool Rate

Per Hrs

(F)

Cool

Code

Location Temp F Hours Mins

PLANT	MILL ANNEALED / DIRECT QUENCHED				
LAB	1800	1			WQ
LAB	1325	16			AC

HT Code: 48A

Furnace

Cool Rate

Per Hrs

(F)

Cool

Code

Location Temp F Hours Mins

PLANT	MILL ANNEALED/DIRECT QUENCHED				
-------	-------------------------------	--	--	--	--

MECHANICAL REMARKS

The tensile and hardness performed for Heat Treat Code 48A are As Shipped tests.

METALLOGRAPHY

GRAIN SIZE (As shipped cond.): Avg. ASTM 9 / Tested at Acuren

MACRO /

Material has been macro inspected and ultrasonic tested at intermediate billet to clear melt-type(piping,inclusions,etc.)defects.

REMARKS

Traveler(s)
21443 A



Heat #
93FC

Ingot#

ATI Allvac 4374 Lancaster Highway

Richburg, SC 29729

Phone (803) 789-3595

Page 5 of 6

Material has been produced, sampled, inspected, and tested in accordance with the customer purchase order and referenced specifications and conforms to the requirements unless otherwise noted in this certificate of test.

Any deviations to specification or customer purchase order requirements relative to testing, test values, hot working fixed practices, have been resolved in writing with customer prior to shipment.

The recording of false, fictitious, or fraudulent statements or entries on this document may violate Federal statutes, including but not limited to Title 18, Chapter 47 of the United States Code, and may be punishable as a felony.

If customer purchase order does not specifically reference a revision to a specification, Allvac will work to the latest revision on file and in effect at time of order placement.

Test methods are per the latest ASTM Standards, currently recognized industry practices; or as agreed upon between Allvac and customer.

Any chemical elements analyzed and found to have values below the actual limits of detection may be reported as < less than or reported at the detection level.

When values are reported to the significant places called for in the specifications, rounding will be done in accordance with ASTM E-29.

This is to certify that during manufacturing, handling, testing and inspection, this material did not come in direct contact with mercury or any device employing a single boundary of containment.

This Certificate of Test shall not be reproduced except in full, without the written approval of Allvac Quality.

No weld repair has been performed on this material.

Material Safety Data Sheets (MSDS) - View or print from our site: www.allvac.com. Printed copies available on request from the Allvac Sales Department.

Allvac products have not come in contact with radioactive, fertile or fissionable materials during manufacturing or processing.

Melt source in compliance with DFAR 252.225-7014, Alternate 1.

SPECIAL REMARKS

MELT METHOD: AOD/ESR

12690

Order(s)

A



Heat #

93FC

Ingot#

ATI Allvac 4374 Lancaster Highway

Richburg, SC 29728

Phone (803) 788-3595

Page 6 of 6

ial melted and manufactured in the United States.

S-400 (GT193) supplier codes: Allvac Monroe - 87012, Allvac Lockport - T1226,
Acuren - T7605, Westmoreland T7869

METHODS: C/S/O/N = ASTM E1019 (2008); XRF = ASTM E572 (2002A/2006*2), ASTM E1085 (1995/2004),
E2465 (2006); OES = ASTM E415 (2008), ASTM E1086 (2008); RTT = ASTM E8 (2008);
ASTM E21 (2009); Stress Rupture = ASTM E139 (2006), ASTM E292 (2009); Creep = ASTM E139 (2006);
y = ASTM E23 (2007A*1); Fracture Toughness = ASTM E399 (2008); Rockwell Hardness = ASTM E18 (2008B);
11 Hardness = ASTM E10 (2008); ASTM E45 = ASTM E45 (2005*2); AMS 2300 = AMS 2300 (K); Grain Size =
E112 (1996/2004*2), ASTM E930 (1999/2007), ASTM E1181 (2002/2008).

12690

DA

**MAGNETIC
INSPECTION, INC.**

9356½ San Fernando Road, Unit B • Sun Valley, CA 91352
(818) 504-0677 • FAX (818) 504-1559

SOLD TO: 3V FASTENERS
320 REED CIRCLE
CORONA, CA 92879
(951) 734-4391

3V
INSP
02

TERMS: net 30

DATE CERTIFIED	DATE RECEIVED	DATE TESTED	CUSTOMER P.O.	INSPECTION METHOD
02-09-2011	02-09-2011	02-09-2011	104244/00597265	ACTIVE MAGNETIC INSPECTION, INC.
55519 S13# MS27039C1-14 CROSS RECESS PASS MAGNETIC TO REG COPPER SULFATE				
PAN HD EXT NASM R/N# 889677 Copper Sulfate 32 pcs Acc: 32 Rel: 0				
<div style="border: 2px solid black; padding: 5px; display: inline-block;"> RECEIVED FEB 09 2011 By: [Signature] </div>				
MATERIAL / HEAT TREAT (STATUS OF PARTS) - 286				
PASSWATE AMS-STD-753C METHOD 102/AMS2700C NET 100% 2-01-10				
Other				
MAGNETIC SPECIFICATIONS				
Acceptance Criteria				
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Reason Passed				
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